

SpeedStream[®] 5667 Ethernet/USB Bridge with SecureRoute

Product Feature Matrix



1 Introduction

The SpeedStream® 5667 is a Dual USB/Ethernet bridge. The SpeedStream® 5667 provides the flexibility of connecting the computer via the Ethernet port and/or the USB port. Plug and Play USB installation allows the SpeedStream® 5667 to be installed on any PC running Windows® 98, Windows® 98 Second Edition, Windows® ME and Windows® 2000. Computers attached to USB and Ethernet ports can share local resources and the ADSL line.

The SpeedStream® 5667 support two different networking feature sets, available as configuration options within the 5667 software. The first feature set supports IEEE 802.1d transparent MAC-layer bridging. The second feature set supports routing of IP datagrams. Although the 5667 software supports both bridging and routing modes, only one mode is supported at a time.

1.1 Legend

Value	Description
Yes	Supported
No	Not Supported
N/A	Not Applicable

2 Power, Mechanical, Packaging

2.1 Power

Feature	Comments
110 VAC 60 Hz power	Yes
220 VAC 50 Hz power	Yes
External AC power supply	Yes
External power switch	No
Power consumption	10 watts maximum

2.2 Physical Interfaces

Feature	Comments
10Base-T connector	RJ-45 LAN port
RJ-11 connector	RJ-11 ADSL WAN port
USB connector	USB 1.1 compliant
Serial console	Mini-din (5 pin)
Reset Button	Yes

2.3 Visual Indicators

Feature	Comments
Front panel LED for Power status	Yes
Front panel LED for DSL status	Yes
Front panel LED for Activity status	Yes
Front panel LED for Ethernet status	Yes
Front panel LED for USB status	Yes

2.4 Product Cabinet

Feature	Comments
Desktop package	Yes
Cooling fan	No

2.5 Environmental

Feature	Comments
Operating temperature	5 to 40 degrees centigrade
Non-operating storage	-10 to +85 degrees centigrade
Operating humidity	20% to 80% Non-condensing
Non-operating humidity	5% to 95% Non-condensing

2.6 Product Packaging

2.6.1 Cabling

Feature	Comments
RJ-11 Phone Cable	Yes, 12ft (3.57 m)
RJ-45 Straight-through cable	Yes, 10ft (3 m)
RJ-45 Crossover cable	Yes, 10ft (3 m)
USB cable	Yes, 6ft (1.82 m)
Serial Console cable	Yes, DB9 female to Mini-din (5 pin) female

2.6.2 Documentation

Feature	Comments
Quick start guide	Yes
Software/Documentation CD	Yes, CD contains USB drivers, quick start guide, and Adobe Acrobat Reader
Safety sheet	Yes
Release notes	Yes, if necessary

2.6.3 Physical Packaging

Feature	Comments
Dimensions	5.5W x 7D x 1.5H in. 139W x 177D x 33H mm
Weight:	1.25 lbs (567 g)
Shock resistant individual shipping package	Yes

2.7 Quality and Reliability

Feature	Comments
MTBF	Exceeds 75,000 hours

3 Safety and Certification

3.1 Safety and Emissions

Feature	Comments
FCC Part 15 emissions	Class B
FCC Part 68 approval	Yes
CE Mark	Yes
UL Mark	Yes

4 User Plane Capabilities

4.1 10BASE-T Ethernet Interface

Feature	Comments
Number of hub ports	1
Factory MAC address	Yes
IEEE 802.3 Ethernet	Yes
Ethernet v2	Yes
Full duplex Ethernet	Yes

4.2 USB Interface

Feature	Comments
Number of USB ports	1
Factory MAC address	No
Data Transfer	Bulk Transfer
USB Compliance	1.1
OS support	98, 98SE, ME, W2K
Host Controller Support	OHCI and UHCI
Data Rate	Up to 12Mbps
Device Type	High Speed

4.3 DMT ADSL WAN Interface

Feature	Comments
Alcatel Microelectronics DMT chipset & version	MTK-20150
Alcatel Firmware	3.6.7.0
Explicit rate operation	Yes; As set by ATU-C
Rate adaptive operation	Yes; As set by ATU-C
Fast or interleaved Forward Error Correction	Yes; As set by ATU-C
Dual latency	No; single latency path is supported
Dying Gasp	Yes
Network Timing Reference	No
Frequency Division Multiplexing	Yes
Echo Cancellation	No
Bit swapping	Yes; As supported by MTK-20150 chipset
Trellis coding	Yes; As supported by MTK-20150 chipset
T1.413 Issue 2 reduced overhead framing	Yes
Support for G.HS, T1.413 Issue2, G.dmt, g.lite, and multi-mode.	Yes, default mode: multi-mode

4.4 AAL5, ATM and Cell Transmission Convergence

Feature	Comments
Maximum simultaneous VCCs	8
Pre-configured PVC	Yes, 0/32, 0/35, 0/36, 0/37, 0/38, 8/35, 1/35
VPI range	VPI= 0-255
VCI range	VCI= 0-65,535
ATM traffic classes supported	UBR + PCR
per-VCC Peak Cell Rate traffic shaping	Yes
ITU I.432 HEC cell delineation	Yes
ITU I.432 cell payload scrambling	Yes
ATM to DMT transmission convergence	AS0 downstream, LS0 upstream ADSL Forum TR-002
ILMI version	Future support
SVC signaling version	Future support

4.5 ATM/AAL5 Data Encapsulation

Feature	Comments
IP encapsulation into PPP	Yes
RFC 2684 Bridged Ethernet encapsulation	Yes, LLC and VCMUX.
RFC 2684 Routed IP Ethernet encapsulation	Yes, LLC and VCMUX.
RFC 2364 LLC encapsulated and VC multiplexed PPP over ATM	Yes
RFC 2516 PPP over Ethernet	Yes
Multiple PPPoE sessions	No

4.6 Packet Forwarding

4.6.1 Layer 3 Routing - IP

Feature	Comments
Static routing	Yes, maximum of 24
Default route	Yes
Variable length subnet masks	Yes
RIP version 1	Yes, active and passive
RIP version 2	Yes, active and passive
VCC to VCC routing	Yes
ICMP redirects	Yes
Simultaneous routing and bridging	No
CIDR Support	Yes

4.6.2 Layer 3 Routing – Other Protocols

Feature	Comments
IPX routing	No, but bridgeable
Appletalk	No, but bridgeable

4.6.3 Layer 2 Bridging

Feature	Comments
IEEE 802.1d MAC layer bridging	Yes
MAC address learning and aging	Yes
Maximum MAC addresses learned	64
Spanning Tree Algorithm	No
Multicast groups	Yes
VCC to VCC bridging	N/A
MAC address filtering	No

5 Control Plane Capabilities

5.1 ATM Virtual Circuit Connections

Feature	Comments
Manual PVC creation and tear down	Yes
ILMI version	Future
SVC signaling version	N/A

5.2 PPP Session Management

Feature	Comments
PPP session establishment	Follows PVC PPP session is established if PVC is active.
PPP session tear down	Follows PVC
Manual PPP connect/disconnect controls	Yes

6 Management Plane Capabilities

6.1 Management Interfaces

6.1.1 Local and Remote Console

Feature	Comments
Command line interface via serial port	Yes
Password Protection	Yes
Command line interface via Telnet	Yes
Telnet access via LAN and WAN ports	Yes

6.1.2 Remote Protocol-based Management

6.1.2.1 SNMP

Feature	Comments
SNMP support	Yes
Configurable Trap manager address	Yes
SNMPv1 status and event notification	Yes
Number of Trap destinations	2
RFC 1213 MIB-II	Yes
RFC 1623 Ethernet MIB	Yes
RFC1695 AToM MIB	Yes
RFC 2662 ADSL MIB	Yes
ADSL Forum Line MIB	Yes

6.1.2.2 HTTP – Web-Based Management

Feature	Comments
Internal HTTP server	Yes
Web management available from LAN/WAN	LAN
Password Protected	Yes
Ability to disable	Yes
Ability to run over port other than 80	Yes
Built-in help / command line manuals	Yes
Browser compatibility	Internet Explorer 4.0 and Netscape Navigator 4.0 or greater
JAVA based	No

6.2 ATM Layer In-band Management

Feature	Comments
Generate and reply to F4 & F5 Loopback OAM cells	Yes
F4 & F5 AIS/RDI OAM cell flow support	Yes

6.3 ADSL In-band Management

Feature	Comments
DMT Embedded Operations Channel (EOC)	Yes; As supported by DSL chipset

6.4 Configuration Management

6.4.1 Software and Configuration Updates

Feature	Comments
Persistent storage of configuration during power down	Yes
TFTP software updates via LAN/WAN port	Yes
Xmodem software updates via console port	Yes
FTP software updates via LAN/WAN port	No
FTP configuration updates via LAN/WAN port	No
Firmware updates via local PC application	Yes
Configuration changes via local or remote console	Local only
Configuration changes via web browser	Yes

6.4.2 IP Address and DNS Name Management

Feature	Comments
Ethernet port factory default IP address	192.168.254.254
Manual IP address assignment for Ethernet	Yes
Dynamic IP address assignment for ATM VCC via PPP/PCP	Yes
DHCP relay agent for LAN clients	Yes
DHCP server for LAN clients	Yes
DHCP client for WAN port	Yes
DNS server for LAN clients	Yes
DNS relay	Yes
Configurable CHAP or PAP	Yes
Synchronized DHCP and DNS servers	Yes; IP address and DNS name assignments are synchronized.
Network Address Port Translation	Yes; Many LAN hosts mapped to a single WAN IP address
Configurable WAN-to-LAN pass-through of NAPT	Yes; Provides access to LAN-side servers (FTP, SMTP, HTTP, etc.)
VPN pass-through support	PPTP (multiple sessions)

6.5 Fault Management

Feature	Comments
Power-on self test	Yes
Front panel alarm indication	Yes
Reset button	Yes
Event logging	Yes
PPP link status and reset	Yes
PING packet generation	Yes
ATMPING cell generation	Yes
Traceroute	Yes

6.6 Performance and Accounting Management

Feature	Comments
Ethernet port statistics	Yes
Bridging statistics	Yes
IP statistics	Yes
ICMP statistics	Yes
PPP statistics	Yes
TCP & UDP statistics	Yes
ATM/AAL5 statistics	Yes
Near end ADSL statistics (ATU-R)	Yes; As provided by DSL chipset
Far end ADSL statistics (ATU-C)	Yes; As provided by DSL chipset

6.7 Security Management

Feature	Comments
Password for Web-based access	Yes
Password for console and Telnet access	Yes
Configurable SNMP community string	Yes
Access lists	No
Number of privileged users	1
Renumber well known server ports	No
Limit access to management from LAN	No

Document Revision History

Version	Date	Editor	Description
1.0	12/02/00	DL	Initial document creation
1.1	12/14/00	DL	Corrections on USB data transfer, speed
1.2	12/18/00	DL	Initial document release
1.3	1/31/01	DL	Additional corrections of physical interfaces, management and password.
1.4	2/15/01	IA	Updated to include upgradeable router feature set.
1.5	3/23/01	DL	Formatting corrections, added metric conversions
1.6	7/9/2001	DL	Formatting corrections, update feature setup. Corrections: added CHAP/PAP support
1.7	7/10/2001	DL	Minor Corrections